

Product datasheet for **MG215243**

Cavin4 (NM_026509) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cavin4 (NM_026509) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Cavin4
Synonyms: 2310039E09Rik; Murc
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG215243 representing NM_026509
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGTAACGCGATAAAGTCTGTCCAAATAGACCTGCTGAAGCTCTCACAGTCACACAGCAATACGGCT
 ACGTTGTCAACAAGCTGTTTGAGAAGACCCGAAAGTCAGCGCTCACATTAAGGATGTCAAGGCCGGGT
 AGAGAAGCAACAGGTTTCGTGAACCAAAGTCGAAACCAAGCAAGAAGAAATAATGAAGAAAACAAATTC
 CGAGTGGTAATCTCCAGGAGGACATCCCTGCCCGCATCCCTGTCTGTTGTTAAAGACAGAAGCCTGC
 CCGAGAACCAGGAGGAGGCCGAAGAAGTCTTCGATCCCCCAATAGAGCTCTCCTCGGATGAGGAGTATTA
 TGTGTAAGAAAGCAGATCTGCCAGGCTTAGGAAGTCAGGCAAAGAGCACATTGACCACATCAAGAAAGCC
 TTTCCAGAGAAAACATGCAGAAGACACGGCAGACTCTTGACAAGAAAGTGAGTGGGATTAGAAGTGGG
 TAGTCACTCCTGAGAGGAGAGAGAGGCTGAGGCAGTCGGGAGAGAGGCTGAGGCAGTCAGGAGAGAGGCT
 GAGGCAGTCGGGGGAAAGATTTAAGAAATCGATTTCCAGTCCCGCTCCCTCAAAGGAAGCTTTTAAGATT
 CGGAGCCTTAGGAAAGCGAAGGATCCCAAGGCCGAGGGCCAGGAGGTAGACAGAGGGATGGGCGTGGACA
 TCATCTCAGGTAGCCTGGCTCTGGGGCCCATCCATGAGTCCACTCTGATGAGTTCAGTGAACAGAAAA
 GGAGGTGACCAAAGGAGGGTACAGTCCCCAAGAAGGAGGGGACCCCCAACGCCTGAGCCTTTGAAGGTG
 ACTTTTAAACCCAGGTGAGGGTAGAGGATGACGAGTCACTCTGTTGGAGCTAAAGCAGTCTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG215243 representing NM_026509
Red=Cloning site Green=Tags(s)

MGNAIKSVQIDLLKLSQSHSNTGYVVKLFKTRKVS AH IKDVKARVEKQQVRVTKVETKQEEIMKKNKF
 RVVIFQEDIPCPASL SVVKDRSLPENQEEAEVFDPPIELSSDEEYVVEESRSARLRKSGKEHIDHIKKA
 FSRENMQKTRQTL DKKVSGIRTRIVTPERRERLRQSGERLRQSGERLRQSGERFKKSISSAAPSKEAFKI
 RSLRKAKDPKAEQGEVDRGMGVDIISGSLALGPIHEFHSDEFSETEKEVTKGGYSPQEGGDPPTPEPLKV
 TFKPQVRVEDDESLLLLLELKQSS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_026509

ORF Size: 1086 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_026509.3](#), [NP_080785.2](#)

RefSeq Size: 2062 bp

RefSeq ORF: 1089 bp

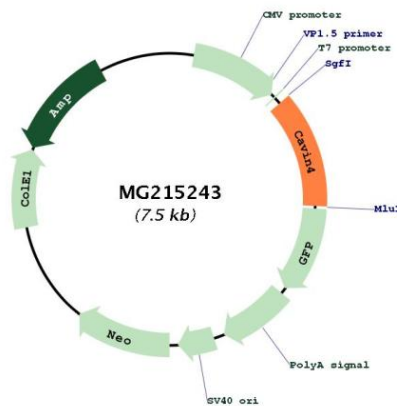
Locus ID: 68016

UniProt ID: [A2AMM0](#)

Cytogenetics: 4 B1

Gene Summary: Modulates the morphology of formed caveolae in cardiomyocytes, but is not required for caveolar formation. Facilitates the recruitment of MAPK1/3 to caveolae within cardiomyocytes and regulates alpha-1 adrenergic receptor-induced hypertrophic responses in cardiomyocytes through MAPK1/3 activation (PubMed:24567387). Contributes to proper membrane localization and stabilization of caveolin-3 (CAV3) in cardiomyocytes (PubMed:26497963). Induces RHOA activation and activates NPPA transcription and myofibrillar organization through the Rho/ROCK signaling pathway (PubMed:18332105). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG215243